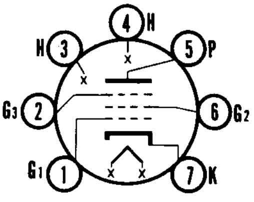


SYLVANIA TYPE 18GD6A

RF PENTODE



7BK

MECHANICAL DATA

Bulb	T-5½
Base	E7-1, Miniature Button 7-Pin
Outline	5-2
Basing	7BK
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

	Series Operation
Heater Voltage	18 Volts
Heater Current[1]	100 Ma
Heater Warm-up Time[2]	20 Seconds
	Min-Max
Heater Current[3]	94-106 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total D C and Peak	100 Volts
Heater Positive with Respect to Cathode	
Total D C and Peak	100 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)[4]

Grid No. 1 to Plate	.0035 $\mu\mu$f Max.
Input: g1 to (h+k+g2+g3+I.S.)	6.0 $\mu\mu$f
Output: p to (h+k+g2+g3+I.S.)	5.0 $\mu\mu$f

RATINGS (Design Maximum System)[1]

Plate Voltage	150 Volts Max.
Grid No. 2 Supply Voltage	150 Volts Max.
Grid No. 2 Voltage	See 6AM8 Rating Chart
Plate Dissipation	2.5 Watts Max.
Grid No. 2 Dissipation	0.6 Watts Max.

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	100 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket
Grid No. 2 Voltage	100 Volts
Cathode Bias Resistor	150 Ohms
Plate Current	5 Ma
Grid No. 2 Current	2.0 Ma
Transconductance	4300 μmhos
Plate Resistance (approx.)	0.5 Megohm
Ec1 for Ib = 10 μa (approx.)	−4.7 Volts

NOTES:

1. For series operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current.
2. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
3. Heater voltage supply variations shall be restricted to maintain heater current within the specified values.
4. External shield No. 316 connected to Pin No. 7 (cathode).

APPLICATION

The Sylvania 18GD6A is a miniature sharp-cutoff pentode featuring a 100 ma heater with controlled heater warm-up time. It is designed for RF and IF applications in AC/DC type radio receivers. Type 18GD6A replaces obsolete Type 18GD6.